

IN THE SPECIFICATION:

Page 1, delete the two paragraphs between the title and the heading "Technical Field" and add the following new paragraph in lieu thereof:

C2 --This application claims priority from Provisional Application Nos. 60/234,327, filed September 22, 2000, 60/285,173, filed April 23, 2001, 60/323,697, filed September 21, 2001 and 60/323,702, filed September 21, 2001, the entire contents of which are incorporated herein by reference.--

Please replace the paragraph beginning at page 24, line 10, with the following rewritten paragraph:

C3 Synthetic peptides were synthesized (SynPep Corporation, Dublin, CA), and purified by reverse phase HPLC. Peptides used in this study had greater than 95% purity as determined by HPLC, and confirmed to be correct by mass spectrometry. The CCR5-D1 (MDYQVSSPIYDINYYTSEPCQKINVKQIAAR) (SEQ ID NO:1), peptide was derived from the N-terminus of human CCR5 (Bieniasz et al, EMBO Journal 16:2599-2609 (1997)). Gp41 peptides DP-178 YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF (SEQ ID NO:2) (Wild et

03
al, Proc. Natl. Acad. Sci. USA 91:12676-12680 (1994)), T-649 WMEWDREINNYTSLIHSLIEESQNQQEKNEQELLEL (SEQ ID NO:3) (Rimsky et al, J. Virol. 72:986-993 (1998)), and T649-Q26L (WMEWDREINNYTSLIHSLIEESQNQLEKNEQELLEL) (SEQ ID NO:4) (Shu et al, Biochemistry 39:1634-1642 (2000)) were derived from HIV-1 envelope gp41 from HIV 89.6 (Collmann et al, J. Virol. 66:7517-7521 (1992)). As a control for HR-2 peptide binding, a scrambled sequence DP178 peptide was made as well.

Please replace the paragraph beginning at page 36, line 7, with the following rewritten paragraph:

04
Neutralizing Epitopes on HIV 89.6 gp140 Before and After Ligation with sCD4. The 2F5 (anti-gp41, ELDKWAS (SEQ ID NO:5)) (Muster et al, J. Virol. 67:6642-6647 (1993)), mab neutralizes HIV primary isolates. Prior to ligation of cleaved 89.6 gp140 with sCD4, it was found that the 2F5 gp41 epitope was exposed. Following sCD4 ligation, the 17b CCR5 binding site epitope (2-4) was upregulated and the 2F5 epitope continued to be expressed.

Please replace the paragraph beginning at page 37,
line 19, with the following rewritten paragraph:

05
HR-2 Peptides. Synthetic peptides were synthesized (SynPep, Inc., Dublin, CA), and purified by reverse phase HPLC. Peptides used in this study had greater than 95% purity as determined by HPLC, and confirmed to be correct by mass spectrometry. gp41 peptides DP178, YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF (SEQ ID NO:2) (Wild et al, Proc. Natl. Acad. Sci. USA 19:12676-12680 (1994)), and T649-Q26L, WMEWDREINNYTSLIHSLIEESQNQLEKNEQELLEL (SEQ ID NO:4) (Rimsky et al, J. Virol. 72:986-993 (1998), Shu et al, Biochemistry 39:1634-1642 (2000)) were derived from HIV-1 envelope gp41 from HIV 89.6 (Collman et al, J. Virol. 66:7517-7521 (1992)). As a control for HR-2 peptide binding, a scrambled sequence DP178 peptide was made. For immunoprecipitations and select SPR experiments, biotinylated DP178 and DP178 scrambled peptides were synthesized (SynPep, Inc.).

Before the Figures, insert the Sequence Listing
submitted herewith.

Seq. List,
before
placed
pls.